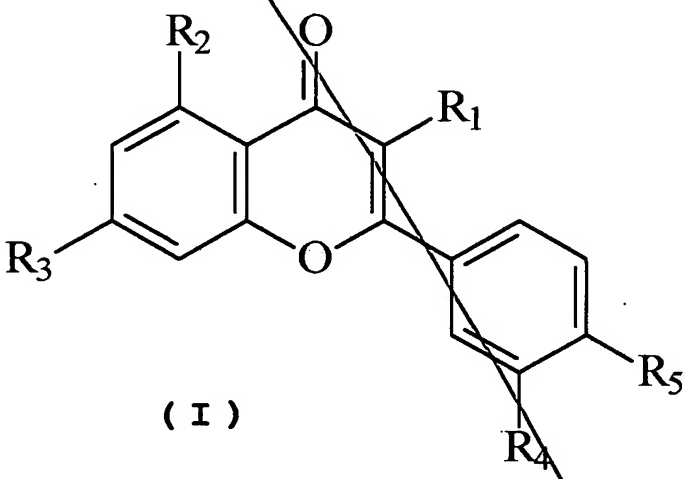
WHAT IS CLAIMED IS:

1. A therapeutic agent for osteoporosis comprising an active ingredient of quercetin derivatives represented by the following general formula(I) and a pharmaceutically acceptable carrier:



(I)

wherein,

R_1 is gentiotriose, glucopyranose, O-arabinofuranose, O-diglucopyranose, O-galactopyranose, O-galactoside-gallate, O-gentiobiose, O-glucopyranose, O-glucuronide, O-neohesperidose, O-rhamnopyranose, O-rutinose, O-sophorose, O-xylopyranose, OCH_3, OH, rhamnogentiobiose, rhamnoglucose or sulfate;

R_2 is OH or O-glucopyranose;

R_3 is OCH_3, OH, O-glucopyranose, O-glucuronopyranose or glucopyranose;

R_4 is OCH_3 or OH; and,

R_5 is OCH_3, OH, O-glucopyranose or O-glucose.

2. The therapeutic agent for osteoporosis of claim 1, wherein the quercetin derivatives are compounds represented by general formula(I) whose R_2, R_3, R_4 and R_5 are -OH as followings: quercetin, aviculoroside, guiajaverin, hyperoside, isohyperoside, isoquercitrin, multinoside A, multinoside A acetate, quercitrin, rutin, quercetin-3-O-

(2"-O-β-D-glucopyranosyl)-α-L-rhamnopyranoside, quercetin-3-O-(6"-O-galloyl)-glucopyranoside, quercetin-3-O-(6'"-O-p-coumaroyl-β-D-glucopyranosyl-(1-2)-α-L-rhamnopyranoside), quercetin-3-O-D-glucopyranosyl-(1-6)-β-D-glucopyranosyl-(1-4)-α-L-rhamnopyranoside, quercetin-3-O-[2"-O-6'"-O-p-(7""-O-β-D-glucopyranosyl)coumaroyl-β-D-glucopyranosyl]-α-L-rhamnopyranoside, quercetin-3-O-[6'"-p-coumaroyl-β-D-glucopyranosyl-β-(1-4)-rhamnopyranoside], quercetin-3-O-[α-L-rhamnopyranosyl(1-2)-α-L-rhamnopyranosyl -(1-6)-β-D-glucopyranoside], quercetin-3-O-[α-rhamnopyranosyl(1-4)α-L-rhamnopyranosyl(1-6)β-D-galactopyranoside], quercetin-3-O-[α-rhamnopyranosyl-(1-2)]-[β-glucopyranosyl-(1-6)]-β-D-galactopyranoside, quercetin-3-O-[α-rhamnopyranosyl-(1-4)-α-rhamnopyranosyl-(1-6)-β-galactopyranoside], quercetin-3-O-α-L-rhamnopyranosyl-(1-2)-β-D-galactopyranoside, quercetin-3-O-β-D-diglucopyranoside, quercetin-3-O-β-D-galactoside-2"-gallate, quercetin-3-O-β-D-glucopyranoside -(1-6)-β-D-galactopyranoside, quercetin-3-O-β-D-glucopyranosyl-(1-3)-α-L-rhamnopyranosyl-(1-6)-β-D-galactopyranoside, quercetin-3-O-β-D-glucuronide, quercetin-3-O-β-D-xylopyranoside, quercetin-3-O-diglucospyranoside, quercetin-3-O-gentiobioside, quercetin-3-O-glucopyranosylgalactopyranoside, quercetin-3-O-neohesperidoside, quercetin-3-gentiotrioside, quercetin-3-methyl ether, quercetin-3-rhamnogentiobioside, quercetin-3-rhamnoglucoside, or quercetin-3-sulfate.

3. The therapeutic agent for osteoporosis of claim 1, wherein the quercetin derivatives are compounds represented by general formula(I) whose R_1 is -OH and three functional groups out of R_2, R_3, R_4 and R_5 are -OH as followings: isorhamnetin, quercimeritrin, rhamnetin, quercetin-5-O-β-D-glucopyranoside, quercetin-7-O-β-D-glucuronopyranoside or spireaoside.

4. The therapeutic agent for osteoporosis of claim 1,

wherein the quercetin derivatives are compounds represented by general formula(I) whose three functional groups out of R_1, R_2, R_3, R_4 and R_5 are -OH as followings: rhamnazin, quercetin-3',4'-di-methyl ether, quercetin-3,3'-dimethyl ether, quercetin-3,7-dimethyl ether, quercetin-3-O-[2"-O-(6'"-O-p-coumaroyl)-β-D-glucopyranosyl]-α-L-rhamnopyranosyl-7-O-β-D-glucopyranoside, quercetin-3-O-[2"-O-6'"-O-p-(7""-O-β-D-glucopyranosyl)coumaroyl-β-D-glucopyranosyl]-α-L-rhamnopyranoside-7-O-β-D-glucopyranoside, quercetin-3-O-rutinoside-7-O-β-D-glucopyranoside, quercetin-3-O-α-L-arabinopyranosyl-7-O-β-D-glucopyranoside, quercetin-7-O-β-D-glucopyranoside-3-O-sophoroside, quercetin-3-O-galactopyranosyl-7-O-diglucopyranoside, quercetin-3-O-glucopyranosyl-7-diglucopyranoside, quercetin-3,7-diglucopyranoside, quercetin-3-gentiobiosyl-7-glucopyranoside or quercetin-3,4'-di-O-β-D-glucopyranoside.

5. The therapeutic agent for osteoporosis of claim 1, wherein the quercetin derivative is quercetin-3,4',7-trimethyl ether or quercetin-3,3',4',7-tetramethyl ether.

6. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is selected from the group consisting of polyvinylpyrolidone and hydroxypropylcellulose.

7. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is a disintegrating agent selected from the group consisting of calcium carboxymethylcellulose and sodium glycolate starch.

8. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is a diluting agent selected from the group consisting of corn starch, lactose, soybean oil, crystalline cellulose and mannitol.

9. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is a lubricating agent selected from the group consisting of magnesium stearate and talc.

10. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is a sweetener selected from the group consisting of sucrose, fructose, sorbitol and aspartame.

11. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is a stabilizing agent selected from the group consisting of sodium carboxymethylcellulose, α- or β-cyclodextrin, vitamin C, citric acid and white wax.

12. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is a preservative selected from the group consisting of paraoxymethylbenzoate, paraoxypropylbenzoate and sodium benzoate.

13. The therapeutic agent for osteoporosis of claim 1, wherein the pharmaceutically acceptable carrier is an aromatic selected from the group consisting of ethylvanillin, masking flavor, flavonomenthol and herb flavor.

14. The therapeutic agent for osteoporosis of claim 1, wherein the therapeutic agent is a pharmaceutical formulation for oral or parenteral administration selected from the group consisting of tablets, capsules, soft capsules, liquids, ointments, pills, powders, suspensions, emulsions, syrups, suppositories and injections.

15. The therapeutic agent for osteoporosis of claim 1 which further comprises calcium or vitamin D_3.